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COVID-19, masks, and hearing difficulty: Perspectives of healthcare providers

INTRODUCTION

Hearing loss is common among adults and associated with increased healthcare utilization and miscommunications that lead to adverse events.[1–4] Despite its importance, hearing loss is often unrecognized or underappreciated.[5] In response to the COVID-19 pandemic, several safeguards have been implemented that may exacerbate communication difficulties among adults with hearing difficulties, including personal protective equipment (PPE) such as masks and face shields, physical distancing, and visitor restrictions. Therefore, we created and distributed a national survey to understand the perspectives of healthcare providers and identify potential interventions for improving communication in healthcare settings.

METHODS

Our final 37-question survey focused on changes in hearing loss awareness since the start of the COVID-19 pandemic, communication challenges in the setting of increased mask use, and tools used by providers to improve communication. The survey was distributed from November 2020 to February 2021 via Listservs to professional societies and on social media websites. Informed consent was obtained online at the beginning of the survey. The study was approved by the institutional review board at the University of California, San Francisco.

RESULTS

We received a total of 257 responses. Of those who willingly reported demographic data, the largest group of respondents were physicians (57.8%, $n = 90/156$) followed by nurse practitioners (19.9%, $n = 31/156$). Most respondents were female (76.7%, $n = 112/146$).

Before the pandemic, most respondents (59.7%, $n = 114/191$) felt that hearing difficulty either had no impact at all or slightly impacted the quality of care provided to patients. These results changed dramatically in the setting of the pandemic with 85.4% of respondents ($n = 164/192$) reporting that hearing difficulty either moderately or extremely impacted the quality of care provided to patients.

Since the start of the pandemic, 37.9% of respondents ($n = 58/153$) reported that awareness of communication issues related to hearing difficulties either significantly increased or increased by a lot. However, most respondents (67.1%, $n = 102/152$) reported that screening for hearing impairment has either not increased or only increased a little since the start of the pandemic. Similarly, 53.6% of respondents ($n = 81/151$) identified that the use of aids in patient encounters has either not increased or only increased a little since the start of the pandemic. Common changes experienced in clinical encounters due to the provider wearing a mask included more difficulty being understood due to muffled speech (37.1%) and making encounters longer (20.6%).

Figure 1 demonstrates the likelihood of healthcare providers utilizing various strategies or interventions to facilitate communication during patient encounters since the pandemic. Respondents were split on the use of sound amplifiers. Respondents mostly reported being very unlikely to use services such as live captioning using a third-party service or real-time speech-to-text applications.

DISCUSSION

The results of this national survey suggest that the implementation of safety measures such as PPE and physical distancing has altered awareness of hearing difficulties and practice patterns of healthcare providers. Specifically, providers were more likely to recognize that hearing difficulties adversely impacted the quality of care received and to experience obstacles to providing care based on mask-wearing. Although providers reported implementing some techniques to facilitate communication (e.g., reducing background noise, raising their voice, and using paper/pen), the likelihood of using advanced communication technologies such as sound amplifiers, live captioning, and real-time speech-to-text applications was low. It should be noted that our study is limited by responder bias given that survey respondents were a convenience sample identified through professional society Listservs and social media.

Our findings highlight potentially useful avenues to improving care for those with hearing difficulties. First,

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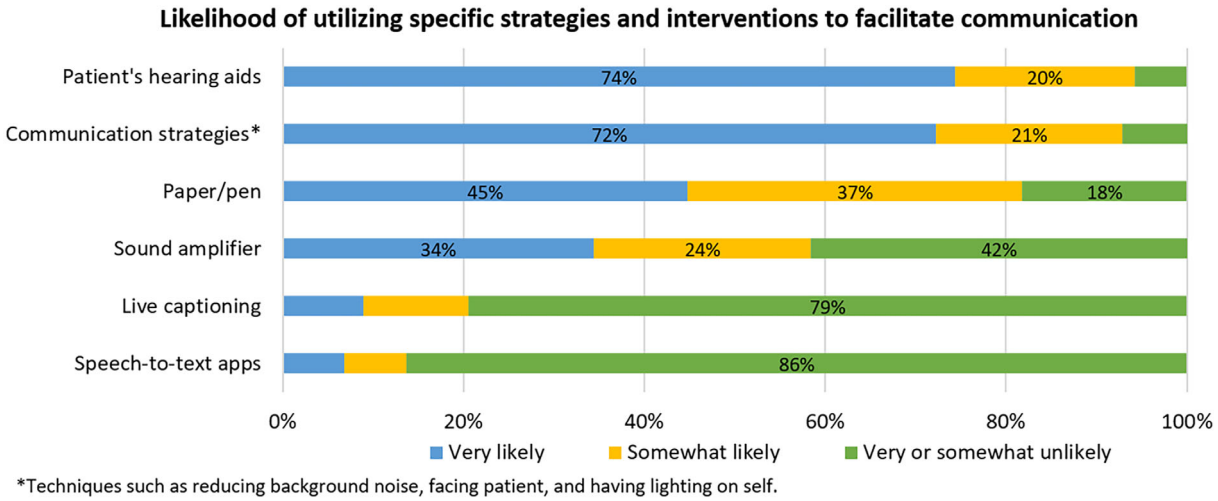

FIGURE 1 Likelihood of healthcare providers utilizing various strategies or interventions to facilitate communication during patient encounters since the pandemic

greater education should be provided about best practices related to communication strategies.[6–8] Second, healthcare providers should be mindful that PPE and visitor restrictions have created obstacles for patients and providers alike. Acknowledging these barriers at the beginning of the visit and spending time to set up communication aids like sound amplifiers and speech-to-text apps may help improve patient satisfaction and facilitate better communication.[9] Third, there is a clear need for greater education on the clinical impact of hearing difficulties and how best to incorporate its consideration into practice settings.[10] Respondents overwhelmingly felt hearing difficulty significantly impacted the quality of care provided since the start of the COVID-19 pandemic. However, most respondents did not identify any changes in screening for hearing difficulties. Hospitals and outpatient clinics would be well-suited to include a hearing screen on admission or before patient encounters. Overall, the results of this survey demonstrate the need for new health system processes and interventions to provide equitable health care for those with hearing difficulty.

CONFLICT OF INTEREST

None of the authors have conflicts of interest including financial interests, activities, relationships, and affiliations.

AUTHOR CONTRIBUTIONS

All authors contributed to the study conception, design, analysis and interpretation of data, and drafting of the manuscript.

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There were no sponsors involved in this project.

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"I don't know how many nursing homes will survive 2021": Financial sustainability during COVID-19

INTRODUCTION

Nursing homes (NHs) have been severely challenged during the COVID-19 pandemic as they manage outbreaks among residents and staff, respond to rapidly evolving policies and requirements, and cope with the devastating loss of residents to the virus, all while continuing to provide care.[1] These difficulties have been compounded by substantial financial challenges. NH operational costs are significantly impacted by decreased revenue from fewer admissions and increased expenditures on staff wages and overtime, personal protective equipment (PPE), screening and testing, and fines for inspection deficiencies.[2–4] Although Federal CARES Act funding provided short-term relief to NHs during the pandemic,[5] it is not expected to guarantee long-term financial sustainability. In this qualitative study, we examine the financial implications of COVID-19 on NH sustainability.

METHODS

This letter reports early findings from the qualitative arm of a large, mixed-methods study. About 160 in-depth, semistructured interviews are being conducted with administrators at 40 NHs in eight diverse healthcare markets across the United States using the unique study design of four repeated interviews at 3-month intervals. Interviews explore the impact of COVID-19 on NHs over this past year, and reveal real-time facility responses, including infection control practices, strategies to maintain staffing and address staffing shortages, ideas to improve staff and resident morale, changes over time, and novel responses to challenges. Each 1-h telephone interview is audio-recorded with participants' consent, then transcribed, reviewed, and de-identified. NVivo (version 12)[6] was used to facilitate data analysis. Our rigorous thematic analysis systematically codes the data; a detailed audit trail records team discussions and analytic decisions.

RESULTS

To date, 115 interviews have been conducted with administrators at 40 NHs. These repeated interviews include round 1 ($n = 40$), round 2 ($n = 38$), round 3 ($n = 28$), and round 4 ($n = 9$) interviews. Themes across interviews